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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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|-----------------|-------------|----------------------|---------------------|------------------|

10/789,268

02/26/2004

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P 0555.14107

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30615 7590 11/02/2007
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EXAMINER

MILLER, BENA B

ART UNIT

PAPER NUMBER

3725

MAIL DATE

DELIVERY MODE

11/02/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|-----------------------|-------------------------------|------------------------------------|--|
| Office Action Summary | Application No. 10/789,268 | Applicant(s) STAGER, BRADLEY R. | |
| | Examiner Bena Miller | Art Unit 3725 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-5,7,9-11 and 17-28 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,3-5,7,9-11 and 17-28 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Remarks in the RCE filed 08/03/07 are duly noted.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 9-11, 17 and 22-26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,757,052. The claims of the instant application recite most of the elements of the patented claims except for one or more first apertures, a set of one or more second apertures and dowel pins. However, it would have been obvious to delete these features from the apparatus in the patent for purpose of making the apparatus more economical to produce.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 3-5, 18, 19, and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is vague and indefinite because in line 8 of the claim recites "said portions (clamping member and wear shoe) spaced apart by a gap that is greater than said thickness so that said knife is not clamped between said portions whereas the claim further recites in lines 10-13, "the apparatus adapted for elastically deflecting said upper clamping member to bring said portions closer together and narrow said gap until sufficient deflection is produced to entirely close said gap whereupon said portions clamp the knife". It is not clear whether the knife is clamped between the clamping member and wear shoe portions. It should be noted that in par. 2 on page 8 of the disclosed specification, the knife is held between the upper clamping member and wear shoe. Applicant attention is also directed to Figure 6 of the disclosed invention.

Clarification of the scope of the claims is required in response to this Office Action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7, 15, 18, 19, 20, 21, 27 and 28 rejected under 35 U.S.C. 102(b) as being anticipated by either of Bielagus et al (US Patent 5,937,923) or Maier et al (US Patent 3,904,139).

The device of either Bielagus et al or Maier et al teaches the elements of the claimed invention including a knife (80 or 2, respectively) having spaced-apart first and second sides defining a thickness of the knife; a base (34 or 1); a wear shoe (42 or 5); and an upper clamping member (76 or 3), for mounting to one side of said base and said wear shoe for mounting to an opposite side of said base, said upper clamping member and said wear shoe having corresponding portions for receiving said first and second sides of said knife, respectively, said portions spaced apart by a gap that is greater than said thickness so that said knife is not clamped between said portions, the apparatus adapted for elastically deflecting said upper clamping member to bring said portions closer together and narrow said gap until sufficient deflection is produced to entirely close said gap whereupon said portions clamp the knife (fig. 6 or fig. 1) as recited in claim 1;

at least one bolt (78 of Bielagus et al) mount the wear shoe and base together and includes cooperatively interlocking portions (see marked copy fig. 6 of Bielagus et al) to prevent movement of the base relative to the wear shoe, in a first direction toward the knife and perpendicular to the axis of the bolt, the interlocking portions meeting so as to define an angle with respect to the first direction that is in a range 45-60 degrees as recited in claim 3 (Note the Examiner takes the position that interlocking portions defines an angle between the claimed range, specifically 50 degrees);

the wear shoe and said base include cooperatively ramping portions (see marked copy figure 6) defining an angle θ inclined with respect to said first direction and adapted to resist movement of said base, relative to said wear shoe, in a second direction opposite to said first direction as recited in claims 4 and 7 (The Examiner takes the position that the cooperatively ramping portions defines the angle θ about 5 degrees—as required by claim 18 and 19);

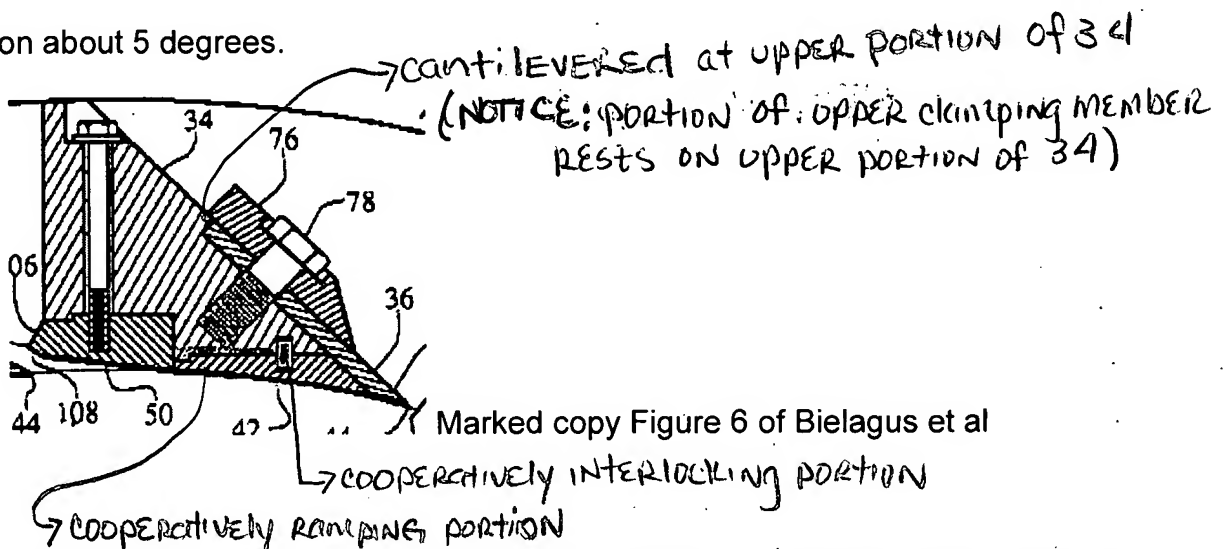
the wear shoe and base include cooperatively ramping portions (see marked copy figure 6 of Bielagus et al), relative to said wear shoe, in a direction away from the knife and perpendicular to the axis of the bolt, the ramping portions defining an angle θ inclined with respect to the direction as recited in claim 5;

a base (34 of Bielagus et al); a wear shoe (42 of Bielagus et al); at least one bolt mounting said wear shoe and base together at one side of said base (78 of Bielagus et al); and an upper clamping member (76 of Bielagus et al) for mounting engagement with said base at an opposite side of said base for clamping the knife between said upper clamping member and said wear shoe, wherein said wear shoe and said base include cooperatively interlocking portions (see marked copy figure 6) adapted to substantially prevent movement of said base, relative to said wear shoe, in a first direction toward the knife and perpendicular to the axis of said bolt, said interlocking portions meeting so as to define an angle θ with respect to said first direction that is in the range 45 - 60 degrees as recited in claim 20;

a base (34 of Bielagus et al); a wear shoe (42 of Bielagus et al); at least one bolt (78 of Bielagus et al) mounting said wear shoe and base together at one side of said

Art Unit: 3725

base; and an upper clamping member for mounting engagement with said base at an opposite side of said base for clamping the knife between said upper clamping member and said wear shoe, wherein said wear shoe and said base include cooperatively ramping portions adapted to substantially prevent movement of said base, relative to said wear shoe, in a first direction away from the knife and perpendicular to the axis of said bolt, said ramping portions defining an angle θ inclined with respect to said first direction about 5 degrees.



(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Loth (US Patent 6.561,885)

The applied reference has a common invention with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in

Art Unit: 3725

the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

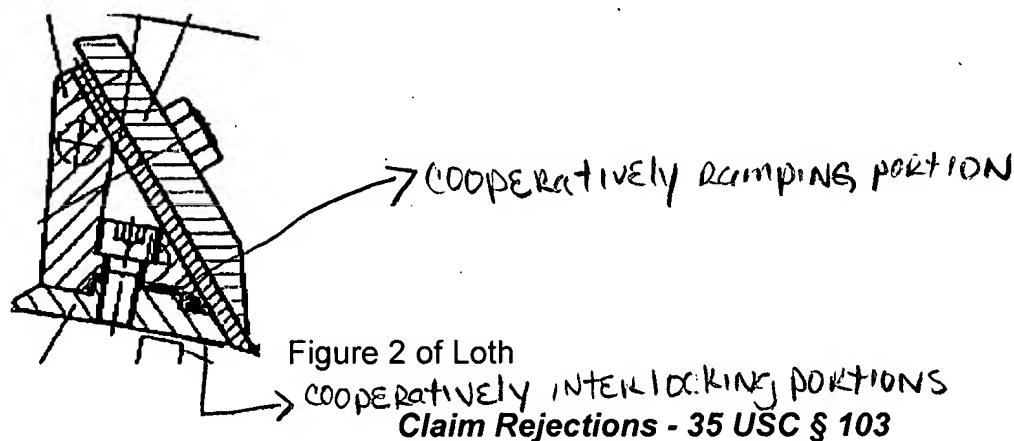
Loth teaches the elements of the claimed invention including a knife (fig. 2) having spaced-apart first and second sides defining a thickness of the knife; a base (1.2); a wear shoe (1.6); and an upper clamping member (1.3), for mounting to one side of said base and said wear shoe for mounting to an opposite side of said base, said upper clamping member and said wear shoe having corresponding portions for receiving said first and second sides of said knife, respectively, said portions spaced apart by a gap that is greater than said thickness so that said knife is not clamped between said portions, the apparatus adapted for elastically deflecting said upper clamping member to bring said portions closer together and narrow said gap until sufficient deflection is produced to entirely close said gap whereupon said portions clamp the knife (fig. 2) as recited in claim 1;

at least one bolt (fig.2) mount the wear shoe and base together and includes cooperatively interlocking portions (see marked copy fig. 2 of Loth) to prevent movement of the base relative to the wear shoe, in a first direction toward the knife and perpendicular to the axis of the bolt, the interlocking portions meeting so as to define an angle with respect to the first direction that is in a range 45-60 degrees as recited in claim 3 (Note the Examiner takes the position that interlocking portions defines an angle between the claimed range, specifically 45 degrees);

a ring assembly comprising two end plates for rotation about an axis of rotation (fig.1); at least two shoulder bolts (fig.3); and a plurality of knife assemblies (fig. 2), each

Art Unit: 3725

assembly comprising an elongate knife having a cutting edge extending along an elongate axis (fig.2), a clamp for clamping the knife (1.1), and a base (1.2) for supporting at least a portion of said clamp, said assemblies for installation between said end plates such that the shoulder portions of said at least two shoulder bolts extend through one of said end plates into said base (fig.3) as recited in claim 9.



The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 4, 18, 19, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielagus et al.

In the event Applicant disagrees with the above rejection, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to have the interlocking portions of the wear shoe and base of Bielagus et al to define an angle with respect to the first direction in the range 45-60 degrees and cooperatively

ramping portions define an angle about 5 degrees for the purpose of firmly holding the knife in place with a minimum amount of applied force.

Claim 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loth in view of Swartwood et al (US Patent 5,979,522).

Loth teaches most of the elements of the claimed invention, except for a dual cutting edge knife. Swartwood teaches that it is well known to use a dual cutting edge knife with a cutting apparatus, such as a chipper disc (fig.2). It would have been obvious to one of ordinary skill in the art to use a dual cutting knife as suggested by Swartwood with the apparatus of Loth for the purpose of cutting wood chips or flakes from pieces of wood.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bielagus et al in view of Swartwood et al (US Patent 5,979,522).

Bielagus et al teaches most of the elements of the claimed invention, except for a dual cutting edge knife. Swartwood teaches that it is well known to use a dual cutting edge knife with a cutting apparatus, such as a chipper disc (fig.2). It would have been obvious to one of ordinary skill in the art to use a dual cutting knife as suggested by Swartwood with the apparatus of Bielagus for the purpose of cutting wood chips or flakes from pieces of wood.

Claims 10, 11, 22-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loth in view of Beilagus et al.

Loth teaches most of the elements of the claimed invention including a wear shoe (1.6), cooperatively interlocking portions (fig.2) and cooperatively ramping portions

Art Unit: 3725

(see marked copy fig. 2 noted above). However, Loth fails to teach an upper clamping member for mounting to the corresponding base as that the portion of the upper clamping member is cantilevered therefrom. Beilagus et al teaches a chip slicer having a cantilevered upper clamping member as seen in marked copy figure 6 above. It would have been obvious to one of ordinary skill in the art to have the upper clamping member of cantilevered as suggested by Beilagus from the base of Loth for the purpose firmly holding the knife in place with a minimum amount of applied force. Further, it would have been obvious to one having ordinary skill in the art, at the time the invention was made, to have the interlocking portions of the wear shoe and base of Loth to define an angle with respect to the first direction in the range 45-60 degrees and cooperatively ramping portions define an angle about 5 degrees for the purpose of firmly holding the knife in place with a minimum amount of applied force.

Response to Arguments

In response to Applicant's remarks that Bielagus fails to teach a cantilever upper clamping member, the Applicant's attention is directed to the above rejection. In regards to the additional remarks, as noted above, the remarks have been duly noted.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bena Miller whose telephone number is 571.272.4427. The examiner can normally be reached on Monday-Friday.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3725

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Bena Miller
Primary Examiner
Art Unit 3725

bbm
October 29, 2007